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COMMUNICATIONS.

Nervous Deafness.

Translated from the French of "Duchenne, De l'Électrisation Localisée." Paris, 1861.

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(Continued from page 338.)

A year after, (in May, 1858,) I considered that Raymond had made great progress; he read fluently, and wrote sufficiently well; he pronounced distinctly, although a little too quickly, like children of his age, who recite what has been taught them. On seeing him again, he said to me very clearly: "Bonjour, monsieur le docteur Duchenne (de Boulogne.)" And he understood the sense of this phrase; because, when he entered into my cabinet, he did not fail to repeat it to me, and to say "Adieu" to me in leaving. He asked for whatever he wanted, and was curious to know the names of certain things, and easily retained them. It will be readily understood that it will require a certain time before his education can be completed on this point.

A new cure of thirty sittings, has still improved his hearing; but in a less noticeable manner than after the two preceding. The child is half deaf. Will he remain in this state, or will his hearing improve? Time will make this manifest, as the family propose to bring this child to me periodically to continue his treatment. I ought to recall to mind the fact that his tonsils were very large, and that M. Mènière advised their excision at the outset. That operation has been very skillfully performed by M. Guersant.

Let us sum up the foregoing. It is perfectly established that a deaf-mute, from birth to the age of eight years, has acquired the faculty of hearing after some electrical excitations of the motor muscles of the small bones, and of the cord of the tympanum; that his hearing has subsequently and progressively improved in the follow-

ing sittings; that, after three courses, each consisting of thirty sittings, and with intervals of six months between the courses, the child is only half deaf; and, finally, that since that treatment, he has been made to speak and to develop his intellectual faculties; in a word, to be educated through the medium only of the hearing.

The treatment is not yet at an end. It remains to be seen whether the results will not yet be more perfect when the treatment shall be more continuous.

Since the publication of this case—that is to say, since 1858—the young Raymond has been invariably brought to me to undergo a new course of treatment, which has always been followed by a noticeable improvement; but in the intervals, his state remains stationary. At present, (January, 1861,) he still remains half deaf. Placed in an institution, where he is being educated through the medium of the hearing, and under the able direction of M. Houdin, Raymond is to be brought to me every three months, and to have twenty excitations at each period. Let us hope that, under the influence of this more continuous treatment, he will be made to enjoy a more complete hearing.

I must add, that since Raymond's faculty of speech has been sufficiently developed to admit of his describing the sensations or impressions made upon him by the Faradization of the cord of the tympanum, and of the motor muscles of the little bones, I have been able to ascertain from him that that electrical excitation provokes in him the normal electro-physiological phenomena—namely, the lingual sensation, and the auditory impression in the depth of the ear.

I have still to publish the cases of two other deaf-mutes, who are on the way to amelioration, if not to cure, whom I have treated by the same excitation of the middle and inner ear. Those two cases are the more interesting, because the

subjects have been previously, for many years, treated ineffectually by the most celebrated aurist-surgeons.

One of these patients, Albin K., of Barcelona, aged nine years, was specially recommended to me by M. Rayer. The child had, for some years, been in the institution of M. Houdin, where the young deaf-mutes, by means of an admirable method, are at one and the same time taught to speak and to read upon the lips. Being endowed with great intelligence, this young boy had made such progress that when he was first presented to me, I could converse with him. He so clearly replied to my questions that I should have believed that he heard me, as well as merely watched the motion of my lips, had I not previously been made aware of his deaf-muteness. He understood me only by the motions of my lips. But I return to the principal subject of this note, the curableness of deaf-muteness; and I proceed to publish the case as edited from the notes, obligingly furnished to me by M. Houdin, of the observations made by him upon the progressive results of the treatment followed by his young pupil.

Case 9.—Congenital deaf-muteness, ameliorated by the Faradization of the cord of the tympanum, and of the motor muscles of the malleus or hammer.—The young Albin K., aged fourteen, of good general health, but deaf from his first year, perhaps even from his birth; for his father, while expressing the former opinion, will not positively affirm it, especially as he cannot support it by reference to any circumstance in the life of the child to which the deafness can seriously be traced as accidental.

The child has been, during several years, unsuccessfully treated by several aurist-surgeons, and, during three years, by catheterism of the Eustachian tube. It was after these unsuccessful treatments that it was resolved to teach him to speak without the aid of the hearing. When we presented him to Dr. Duchenne, the child could not hear anything. He only perceived, as born deaf-mutes do, noises impressing upon the air or upon the earth, a concussion capable of affecting the tactile nerves; such noises, for instance, as claps of thunder, or the reports of cannon.

By dint of the most persevering efforts, Albin, notwithstanding his profound deafness, had learned to speak almost the same as others speak, and to read upon the lips of others with a remarkable facility. He thus was able to give us an exact account of his impressions, and of the results obtained during a first series of thirty electrical excitations.

From the first sitting, the most favorable symptoms were manifested; the electrical excitations produced an aural sensation, which the child compared to a kind of tickling or pricking which

was not at all disagreeable, and which soon changed into a sound which he represented to us by the sounds *tic tic, tac tac*. In the second sitting, there was soon a prickling sensation in the tongue, which Dr. Duchenne considers a favorable symptom. These various sensations appeared to give extreme pleasure to our young patient, whose brightened countenance and look of astonishment even were more expressive than his words of the joy that he felt. Those sensations were entirely new to him, as he has since frequently repeated to us.

After the third sitting, we could perceive the existence of auditory sensibility; the vowels *a* and *o* were positively heard, when uttered in a loud tone to be sure, and with the mouth pretty near to the young patient's ear. But we took especial care to keep a space between them, so that it was impossible for the lips, in their motion, to impress the ear by touch; and the current of the vibrating air was with like care directed, so as not to strike upon the nervous points of the skin. In that same sitting, the other vowels were heard in distinction from the first two; but only confusedly perceived. The child often mistook one for the other. There was an expression of mingled joy and astonishment at thus hearing the human voice; and renewed assurance that that sensation was entirely new.

After the fourth sitting, all the five vowels were perceived, the mouth being still near the listener's ear; but the vowels being uttered in a comparatively low tone, only a little above that of common conversation. The *a* and the *o* were repeated without any hesitation after they were first uttered; but the other vowels, in order to their being repeated, had to be uttered several times to the child. The degree of facility in which each of the vowels was perceived, may be represented by the following scale: 1st, *a*; 2d, *o*; 3d, *e*; 4th, *i*; 5th, *u*.

The progress did not stop there. In the course of the thirty sittings, the child had learned to catch by ear a hundred words, with which the hearing had now become familiar, and upon which the child generally makes no mistake. Some short phrases, such as, "*Where is your hat?*" and "*Give me my hat?*" are also perceived at a short distance, and when spoken in a tone only slightly raised. We have also practiced the child in hearing himself, which he succeeds in doing by raising his voice.

We daily make no less conclusive experiments with the aid of the harmonium organ. Previous to the first sitting, certain of the lower notes were only perceived like explosive sounds were, by the tactile nerves. Very soon after that first sitting, we observed that the ear was more or less affected by those same notes. Every day, or every other day, the ear, more or less regularly, seized one or two additional notes, so that having reached and passed the medium corresponding to the barytone of the voice, we have at length arrived at the highest notes, which have always appeared to me to be the hardest for our children to seize.

In the interval of those thirty sittings, we have thus proceeded along a sounding-board of five and a half octaves—that is to say, thirty-five to forty notes really acquired.

In the same space of time, various other circumstances have further and superabundantly confirmed the amelioration of the hearing that was already so evident. From the earliest sittings, the child has uttered a cry of mingled astonishment and joy on hearing the steam-whistle of a locomotive-engine; a few days afterward, it was the far less intense whistle of the conductors of the omnibuses that produced the same effect upon him. About the same period, as we took the child to a fête in the neighborhood of Paris, he repeatedly made us aware that he heard the music of the shows. In previous years that same music made not the slightest impression upon him. On the fourteenth of August, near the day of the fifteenth sitting, from the Elysian Fields to the top of the Rue de Châillot, the child asserted that he heard the explosions of the fireworks let off upon the heights of the Trocadéro. At the same period, the noise of the carriages in the Rue Chaussée-d'Antin frequently caused him to carry his hands to his ears, as though to protect them against a too powerful and disagreeable sensation.

It is important to remark, as a natural supplement to this observation, that the organ has afforded us a powerful aid in the slow, but progressive development of the hearing awakened to action under the influence of electrical excitation. We have often pronounced some words in an elevated tone, and they have not been heard, even when repeated four or five times. Five minutes of attentive listening near the key-board of the organ, during which time we, so to speak, saturated the ear with methodically graduated sounds, sufficed to make the same words instantly heard, though spoken less loudly, sometimes even in the ordinary tone of conversation.

To sum up: here we have a child whose deafness, whether congenital or accidental, was so profound as to condemn him to actual dumbness, who, put in possession of the power of speech, without aid from the ear, by effects of unheard of patience and perseverance, could hear absolutely nothing, not even the vibrations of the organ, when he was first presented to me. That child, after a course of thirty Faradizations of the middle and inner ear, heard, not only from thirty-five to forty notes of the organ, but also the whistle of the omnibus conductors, music performed in the open air, the explosions of fireworks at a distance of 500 to 600 mètres at the least, and, finally, which is still more positive, even the sounds of the human voice, and a hundred articulated words. The fact is certainly worthy of the deepest interest, and of the most serious attention.

After an absence of nearly two months, the ear

was in about the same condition as at the child's departure. There was a perceptible weakening in the degree of functional aptitude, obviously resulting from the lack of exercise; two or three notes of the organ (the highest) were lost, but they have been regained since the exercises were resumed. What is important to ascertain, is that the improvement gained in the hearing has not diminished. The treatment will be continued.

At the same period, I made a similar electro-therapeutic trial in the case of a young girl, laboring under congenital deaf-muteness, who had fruitlessly been subjected to a host of various treatments. During three years, M. Hubert Valleroux, whose great ability is so widely known, had performed catheterism. That learned aurist-surgeon believed himself the better entitled to hope for a good result from that treatment, because by it he had cured the girl's brother, who was a deaf-mute from birth. On that account, the family had solicited M. Hubert Valleroux very perseveringly to continue his efforts.

Both children were of lymphatic temperament, and both presented obstruction of the Eustachian tubes. Catheterism, perseveringly performed by M. Valleroux for a long time, had completely freed them. The hearing of the boy was progressively developed; but the girl remained as deaf as before. The conclusion to be drawn from that fact is, that obstruction of the tubes was the sole cause of deafness in the case of the boy, while in the case of the girl, some other cause existed, whether some anatomical alteration of some portion of the middle or inner ear, or a paralysis of the auditory nerve. (We shall presently perceive what was the nature of that deafness.)

After three years, the catheterism, which was always painful to Mademoiselle X., and which had to be performed two or three times a week had to be discontinued. Then, M. Valade Gabel was, for some time, engaged in teaching the young girl how to speak, and how to read upon the lips of others. A lady of great intelligence afterward took charge of the young girl's education, using M. Valade Gabel's method for the development of her speech. That lady has daily watched the influence upon the hearing of her young pupil of the Faradization of the motor muscles of the small bones, and of the cord of the tympanum. I subjoin, in the form of a case, a note in which the lady has been kind enough to describe the modifications ascertained during the treatment.

To be continued.

Electro-Therapeutics.

By H. LASSING, M.D.,

Of New York.

Though electricity has been found very useful in the treatment of certain diseases, it is, as yet, but little understood by the profession generally; and as its success, in the hands of illiterate men, has furnished means of imposing upon public credulity, it is due to the cause of medical science that some accurate information should be given about its *modus operandi*, and actual effects. For it must be admitted that if, in the hands of uneducated men, good results accrue from its use, much greater good will result from its employment by enlightened practitioners. A want of sufficient knowledge on the subject has led to the empirical use of electricity, and thereby caused an unjust prejudice against this important means of cure.

With a view to remove this prejudice, I shall attempt to lay before my professional brethren, as concisely as I can, the knowledge I have acquired on the subject by considerable research and long experience.

First. As to the best form in which to use electricity, I have always preferred electro-magnetism, for the reasons that it is the most convenient, besides furnishing an uninterrupted flow, and adding an additional beneficial effect in the shape of magnetism. Various kinds of apparatus are used, but I prefer a machine consisting of a helix, of insulated coarse and fine wire, wound over small, soft iron wire for a temporary magnet, with a horizontal magnet, spring hammer, and silver-pointed screw, to break the circuit, connected with one of Smee's zinc and platina batteries, to be excited by dilute sulphuric acid. These machines give six currents of various powers and effects, are light, portable, clean, and convenient for use. They are made by Hall, in Boston; Kidder, Horn, Pyke, and Amos Brown, in New York. Those made by Brown, having the most useful currents and appliances, I consider to be superior. There are also magnetic machines producing frictional electricity by a crank motion, but I have not yet seen any that are reliable. They are both inconvenient and more expensive.

Second. As to the effects on the economy, electricity, galvanism, and electro-magnetism are all considered excitants; and, of course, are counter-irritant and revellent. Beside this, as I shall

show, electro-magnetism will be found tonic, sedative, antispasmodic, cathartic, emetic, anæsthetic, and, in fact, with proper appliances, can be made to answer almost any therapeutic indication. The question, how it acts, being in dispute, I will merely state that I have every reason to believe that, aside from its excitant action under certain circumstances, it acts on the economy by increasing or decreasing the quantity of positive or negative electricity, which the human body may contain; and that in diminishing the positive electricity, it, of course, increases the negative, and *vice versa*.

After describing the currents, and the difference between the poles of magnetic machines, I will give cases, and the manner of application, thus showing the therapeutic effects of electro-magnetism.

I will take for the subject of my description a machine of Amos Brown's make, better known as Dr. Smith's, because it is most commonly used in medical practice. After the machine is connected with the battery, two posts are found at each end of the stand on which the machine rests. The posts on the left end (where the piston pulls out) furnish the to-and-fro current which is induced through the entire helix, and produces a powerful sensational effect. The posts on the right end furnish the direct current, which is simply an intensified galvanic current, passed through the coarse wire of the helix, and thus furnishes a very mild sensational electro-magnetic current, of strong chemical power. It is this latter current only that will electro-plate, show chemical decomposition, and act as an anæsthetic. By a connection of the negative pole of the battery with the positive pole of the to-and-fro current, four more currents, of mixed powers and effects, are produced, further details of which are unnecessary.

I shall take as *Case 1*, R. A., aged fifty-four, a seafaring man, of a nervous, bilious temperament; from whose history nothing could be gathered to give a clew as to the cause of the disease, excepting that he was suddenly attacked shortly after laboring under a high state of nervous excitement, and lying exposed in a draught on board ship at sea. He was afflicted with paralysis hemiplegica. There was an entire loss of voluntary motion on the right side, coming suddenly and immediately. The eye and mouth were drawn on that side, memory and judgment were much impaired, and speech was indistinct; saliva flowed from the mouth. The muscles on the affected side were considerably wasted and flaccid. This gentleman, while under another physician's treatment, had been bled and blistered, and violent

drastics had been resorted to, but without deriving any benefit from them. His digestive functions and portal system were much deranged. I resorted to an emetic, then gave tonics; kept the bowels soluble by saline cathartics, and advised friction with a strong stimulating liniment of conium, turpentine, and arnica, combined with camphor and opium. Beside this, he was operated upon, twice every day, with electro-magnetism, as follows: Negative conductor immersed with patient's right foot in a basin of warm salt water; positive conductor along the entire vertebral column, beginning at the first cervical, and passing to the coccyx, not returning, but breaking the circuit, and commencing again at the cervix; thus applying it for about fifteen minutes each time. I then let the patient hold the negative conductor in his hand, and by applying the positive conductor at the origin of the muscles of the arm, produced contractions, to which his attention was directed; and exhorted him to make the same movement without the aid of electricity, the same proceeding was had with the limb. The positive pole was also applied along the side of the neck and chest. With little variation, this treatment was persevered in for two months, the patient gradually improving. Also ordered exercise, gradually accustoming him to do away with crutches, canes, elastic straps, and electricity, as assistants to locomotion; and the patient was finally discharged cured, after three months' treatment. No impediment to motion is now perceptible, the muscles of the face and mouth are now again equally balanced, and the entire effects of the paralytic attack appear to have disappeared. General health good.

Case 2.—J. A. B., aged thirty-eight, a government agent for the Indians; from exposure to wet and cold on the prairies, lost the use of the muscles on the anterior and external part of both legs; and, of course, could not voluntarily flex the ankle, raise the foot or toes, abduct or rotate it. In this case contractions were produced by applying the positive pole at the upper, and the negative pole at the lower insertion of the affected muscles; and by slight constitutional treatment, with local stimulating liniments, the use of the muscles was entirely restored in a few days.

Case 3.—W. J., a clergyman, aged fifty-four, was for many years afflicted with paralysis agitans of the hands and forearm, which appears also to have affected his father. Various internal remedies, including strychnia, had been ineffectually tried, the latter to his injury; electro-magnetism was resorted to in this case, with but little hope of success. The patient merely holding the two conductors in his hand for half an hour daily, changing the conductors from one hand to the other. In two months, when the patient had been greatly improved, treatment was left off; and, in a very few days, the patient relapsed to as bad a state as ever. Treatment was resumed after about six weeks, when improvement again rewarded the effort; and I am in hopes that, by continuing the applications, the improvement will

be permanent. It is a fact worthy of mention that I found in all my patients, under treatment with electro-magnetism, but particularly in this case, a great improvement in their general health, owing, no doubt, to the tonic effect of the applications.

Case 4.—I. G., aged thirty-four, has been a fast liver, but always enjoyed good health; was suddenly taken with paralysis of the left arm, which rapidly extended to limb and head; no local pains are felt, but much inconvenience from spasms in the arm, obstinate constipation, retention of urine, and muscles are flaccid and wasted. The spine was very sensitive to electricity, particularly in the region of the last dorsal and first lumbar vertebrae. A change of structure had evidently taken place.

Diagnosis.—Spinal meningitis (chronic.) This was afterwards confirmed by a slight effusion of pus, with a little gelatinous matter. Resort was had to active purges, followed by salines, an evaporating lotion of æth. sulph. to spine, and electricity applied daily, the negative pole to the feet, the positive along the spine. Diaphoretics were also exhibited, and with good effect. The spasms in the arms were much relieved by the applications. Improvement was very slow, but the patient was made to walk with one cane, when, to my great regret, I was deprived of further opportunities by his accidental death, caused by a fall from a wagon. No autopsy was permitted.

I may state here, that I have seen great benefit derived from a strap of India-rubber affixed to the ball of the affected foot, and connected at the knee with a band, passing around the patient's neck; this assists the patient in raising the foot, and makes locomotion much easier and more comfortable.

Case 5.—A lady, aged twenty-seven; general health good, excepting that her bowels were somewhat costive; subject to epileptic fits of an aggravated nature. No exciting cause could be found. In this case, in addition to tonics and purgatives, electricity was used for its revellant, counter-irritant, stimulant, as well as sedative and tonic effects, more to act on the imagination than otherwise. Emetics were given for similar purposes. The positive pole being applied along the spine, the negative was applied to the extremities. During two months it was thus applied, and the patient was free from attack; whereas, previously she was subject to several attacks a day. Then she became careless, and when four days had elapsed after an application, the fits recurred; but not so violently as before. The use of electricity being resumed, the attacks ceased; and for ten months which have now passed since her last attack, she has been free from them, having the machine applied by her husband daily, under my directions. And it may be interesting to add, that one month ago, she was delivered, after an easy labor, of a fine, healthy, male child—her

first, she having, in consequence of previous epileptic attacks, aborted three times.

Case 6.—Madame C., aged forty-eight; general health good, but of a delicate habit; was afflicted with neuralgia, seated in the brachial nerves, for three years, evidently owing to a blow from a falling brick she had received on the shoulder. Partial paralysis of the arm had also taken place. The positive pole was applied, through a wire-brush, along the course of the external branches of the nerves of the arm downward, and in one direction only for fifteen minutes each day. Codium was applied externally, bowels regulated, and compound tincture of cinchona and gentian given internally; and after eight applications, this patient entirely recovered the use of the arm, and has ever since been free from pain.

I find that by enumerating individual cases, I will occupy too much space, so I will give my experience with electricity in rheumatism collectively. In conjunction with constitutional treatment, I pass a current through the affected parts. If the current is direct, it soothes and relieves the pain; and when the to-and-fro current is used, it stimulates and warms. I have found it the best local application, with the quickest results.

In *hernia*, par engouement, I have found this agent most valuable. Every effort I had made for a reduction, proved useless, when, finally, I inserted the positive pole, connected with a proper instrument, into the rectum, and the negative pole, connected with a silver plate, was placed upon the tongue; this immediately produced an undulating motion of the bowels, previously motionless; no shock was received, nor was there any contraction of the abdominal muscles. The patient was soon in a state of diaphoresis, the muscles relaxed, and the hernia was spontaneously reduced. After removing the instrument from rectum, it was followed by a copious evacuation of hardened feces.

In *asthma*, I have applied it frequently only for five or ten minutes from the nape of the neck to the pit of the stomach, and it was immediately followed by a relief of the dyspnoea.

In *amenorrhoea*, I apply the negative pole to the feet, and the positive pole to the abdominal parietes and thighs; and in very bad, obstinate cases, through an insulated tube to the os uteri, and have always met with success.

In *chorea*, I apply the negative pole to the patient's feet, the positive to the head, (the hair being previously wetted,) temples, then down the spine and over the body generally; and in three cases I have met with success.

As an absorbent to tumors I pass electricity,

through the tumor in various directions, and thus also stimulate them.

As an anæsthetic, I connect the negative pole to the instrument to be used, and the positive is held in the patient's hand; the handle of the instrument is insulated. I use the direct current; and by applying a gentle power, the nervous pain given by cutting, laceration, or in extracting a tooth is neutralized almost entirely by the current with more ease and comfort than can be obtained from a freezing lotion.

How electricity acts as an emmenagogue is perceptible, without further explanation, when its contracting power is considered.

In curvatures of the spine, I have also found it very useful in assisting a proper supporter to straighten the column, by contracting the distorted muscles, and stimulating the weak parts.

There are many other cases in which electricity, properly applied, will be found useful; but I have said enough to show what it is, and what may be expected from it.

I do not claim any originality in my manner of applying electro-magnetism; I am only guided by my diagnosis, and a correct anatomical and physiological view of the pathological indications of the case; and I believe that were electro-magnetism more generally used, with proper precaution, more suffering would be relieved and the afflicted restored, and the occupation of many imposters would be gone.

In conclusion, I cannot but respectfully caution the profession against the too prevalent custom of sending patients to so-called electricians to be treated. There are many who apply electricity, in this city particularly, styling themselves doctors, who, in reality, know nothing about the agent they employ, and only aggravate what they are expected to relieve. If electricity is not employed by a competent physician, or at least under his direction, it had best, as well for the good of the patient as that of the profession, not be employed at all.

I will at another time describe a case of tetanus, where I used electro-magnetism with good results, as also a case of hydrophobia; and can give cases, with more details than I have in this paper, in many very prevalent diseases.

To be continued.

Food for an Army.—It is estimated that the army of the United States consumes daily more than six hundred tons of provisions.

Medical Societies.

THE BERKSHIRE (MASSACHUSETTS) MEDICAL SOCIETY.

June 25th, 1862.

The Society met at Pittsfield, in the Chemical Hall of the Medical College.

Dr. Collins, the retiring President, invited to the chair, and presented to the Society, his successor, Dr. Selden Jennings, who, with a few appropriate remarks, accepted the post for the year, and promised a faithful discharge of its duties.

After the reading and approval of the minutes of the annual meeting, the President presented a letter from Dr. Cotting, Recording Secretary of the Massachusetts Medical Society, in which Pittsfield was designated as the place of its next annual meeting—time, the third Wednesday in June, and Dr. Timothy Childs was announced as the Anniversary Chairman.

Dr. A. M. Smith introduced the subject for discussion, viz., *Puerperal Convulsions*, by reporting the following cases:—

Case 1.—Season, spring. Age, forty. Temperament, lymphatic. Third pregnancy, at term. Result, death of mother and child. This patient was seen by Dr. Smith only a half hour before death; labor had lasted thirty-six hours; only one convulsion took place. The patient had been managed by a "hard-hearted and soft-headed nurse;" she had had but little exercise, had lived high. Her weight was 250 pounds.

Case 2.—Season, autumn. Age, twenty-six. Temperament, nervous. Third pregnancy, at term. Result, mother and child saved. Labor of twelve hours' duration. Coma for six hours. Convulsions for eight hours. Treatment, "heroically bled." She was about the house in a week.

Case 3.—Season, spring. Age, twenty. Temperament, nervous. First pregnancy, at term. Result, mother and child saved. Convulsions came on after delivery, five in number. No coma. Treatment by anodynes.

Case 4.—Season, spring. Age, twenty-six. Temperament, lymphatic. Second pregnancy, at the eighth month. Result, recovery of mother, loss of child. Convulsions lasted twelve hours, labor eight hours, coma forty-eight hours. Treatment, venesection and anodynes. This was the second labor at the eighth month; the previous labor had been like this one in every respect. Since the last, she has had an abortion, also attended with convulsions, but her health is still good.

Dr. Smith said he expected to find a difference of opinion on the subject of the treatment of puerperal convulsions. He recognized the hysteric, epileptic, and apoplectic forms of the disease; had regarded the two latter as imperatively demanding venesection, but endeavored also to remove the exciting cause, and diminish irritability by narcotics.

Dr. Stiles said that he had bled but once in his practice, and that was in a case of puerperal convulsions with albumen in the urine, in which both mother and child were lost; that was eight years ago, and now he would employ a very different treatment. He reported the following case, occurring in April last. Age, between twenty and twenty-five. Temperament, lymphatic. First pregnancy, at term. Result, mother and child saved. Treatment, etherization, cupping of neck. Duration of labor, twelve hours; convulsions commenced with the first symptoms of labor; coma after first convulsion, lasting twenty-four hours. Dr. S. thought the epileptic, apoplectic, and hysterical forms of puerperal convulsions but grades of the same disorder, and that toxæmia was the cause, other conditions also having an influence. The greater the proportional development and activity of the spinal system, the greater was the liability to convulsions. Opium would produce tetanic spasms in a reptile, and convulsive twitchings of the muscles in the dog or rabbit; children were more liable to eclampsia than adults, from this cause. The experiments of Chossat proved that in inanition or wasting disorders the nervous system scarcely loses its weight. It is rare to find the central nervous system suffering with the rest of the body; even at the close of wasting disorders the intellect is often clear and active. It is possible to render the nervous system predominant over other systems. Females, both naturally and from their mode of life, particularly puerperal females, are on this account more disposed to convulsive disorders. The female brain averaged one-eleventh ($\frac{1}{11}$) less than the brain of the male.

Eclampsia and epilepsy differ only in their march. Their causes are of two kinds: 1st, mechanical, as when a spiculum of bone irritates the brain, or as in the artificial epilepsy produced in the lower animals by a hemi-section of the cord in the dorsal region. 2d, from substances in the blood, as strychnine, opium in the lower animals, and from organic poisons, as in *trismus nascentium*. The capillaries of the central nervous system are well supplied with muscular fibres; in no region can they be better studied. It is possible by acting on the sympathetic nerve by galvanism to contract the capillaries to such an extent that scarcely a drop of blood shall pass through them, as in experiments on the submaxillary gland. The symptoms of epilepsy and eclampsia are those of a sudden contraction of the capillaries of the brain and spinal cord; the convulsions result as they do in death from hemorrhage; the loss of vision which immediately precedes the onset of the convulsion, was from this cause, just as it occurs on rising from a sitting or recumbent posture to an erect one. There is a *vis mediatric* in the central nervous system protecting it from over-stimulation. When irritated from any cause, the nervous agent overleaps its usual channels, acting on the sympathetic nerve like galvanization in the experiments alluded to; blood is driven or barred from the cord, and that sud-

denly, producing the immediate onset of convulsions.

Pregnancy is a source of stimulation to the cord. In women dying in childbed the cord is found congested in the lumbar region, but this is insufficient to account for the disease. Neither is the predisposition to convulsive disease, in the female with any eccentric exciting cause whatever, (as indigestion, constipation, hemorrhoids, irritation of the bladder, pressure on the perineum,) sufficient to account for the convulsions, else they should be much more common. Albumen had often been found in the urine, and would be found much oftener if sought for; but even when it is not found, it is no proof that the blood disorder which gives rise to its secretion may not have made considerable progress. The presence of albumen in the urine had been attributed to the pressure of the gravid uterus on the emulgent veins; it would be more proper to look to its pressure on the diaphragm. He did not believe that the convulsions accompanying albuminuria were due to either urea or carbonate of ammonia, but rather to organic poisons, resulting from disassimilation, or an improper constitution of the organic constituents of the blood. Imperfect respiration, crowding, sedentary habits, the loading of the blood with excreta from the tissues both of mother and foetus, were the most probable causes. He thought the disorder most frequent in the spring, from the winter's confinement to the house, from the seclusion of the pregnant female. *Trismus nascentium* could be traced to breathing a noxious atmosphere: tetanus could very often be traced to the same cause—hysteria, neuralgia, also. He therefore discarded venesection, employed anæsthesia, morphine hypodermically, and sought to diminish sources of irritation; but prophylaxis was more important.

Dr. F. A. Cady reported the following cases:—

Case 1.—Season, summer. Age, between twenty and thirty. Constitution rugged, plethoric habit. Third pregnancy, about six months advanced; labor brought on by a fall. Result, death. Treatment, bloodletting abundantly. About twenty convulsions occurred in a period of eight hours.

Case 2.—Season, autumn. Age, between twenty and thirty. Temperament, lymphatic. First pregnancy, at term. Convulsions came on twenty-four hours after delivery. Result, mother and child saved. Treatment, cathartics, enemata. About five convulsions occurred; they ceased when the bowels were moved; the coma also.

Case 3.—Season, summer. Age, between twenty and thirty. Temperament, nervous. Second pregnancy, four months advanced. Result, recovery. Treatment, venesection, anodynes. Convulsions came on with labor pains, and ceased on delivery, and the administration of anodynes.

Case 4.—Season, summer. Age, between fifteen and twenty. Temperament, lymphatic (pale and fat). First pregnancy, at term. Result, death of mother and child. Treatment, venesection, cupping, anodynes. Convulsions of one side only, paralysis of the other. Forceps delivery. Con-

vulsions came on an hour before delivery, and coma lasted from delivery to death.

Case 5.—Season, spring. Age, between twenty and thirty. Temperament, lymphatic. First pregnancy, eighth month. Result, recovery of mother, death of child. Treatment, venesection, anodynes, enemata, counter-irritation to spine. Coma came on with the third convulsion, and lasted forty-eight hours after delivery. Mind wandering for several days. The child had been dead for several days, at least.

Dr. Cady thought an exaltation of the reflex action of the cord, under the influence of pregnancy, was a sufficient predisposing cause of puerperal convulsions to permit exciting causes of various kinds to call forth convulsive action.

Dr. C. E. Brewster reported eight cases, as follows:—

Case 1.—Season, summer. Age, between fifteen and twenty. Sanguine temperament. Second pregnancy, at term. Treatment, venesection and anodynes. Mother recovered, child survived. No convulsions after venesection. Duration of labor, twenty-four hours.

Case 2.—Feb. 24, 1860. Age, between twenty and thirty. Plethoric habit. Fourth pregnancy, at term. Convulsions came on four hours after delivery; the patient had left her bed and walked about. Death in thirty-six hours after the first convulsion. Treatment, counter-irritation to spine, injections, and venesection after second convulsion.

Case 3.—April 24th, 1854. Age, between twenty and thirty. Plethoric habit. Third pregnancy, at term. Convulsions twelve hours after delivery—exciting cause, improper diet. Coma after two or three convulsions. Recovered. Treatment, venesection, cathartics, injections, counter-irritation. Recovery slow.

Case 4.—July 8th, 1854. Age, between twenty and thirty. Robust constitution. First pregnancy, at term. Convulsions came on twenty-four hours after delivery. Coma with first convulsion. Recovery. Treatment, venesection, cathartics, counter-irritation. Only two convulsions occurred.

Case 5.—July 14th, 1847. Age, between twenty and thirty. Robust constitution. First pregnancy, at term. Coma with first convulsions. Duration of labor, twenty-four hours; delivery with forceps. Two convulsions occurred. Mother recovered; child survived. Treatment, venesection, anodynes. No convulsions after venesection. Cause, pressure on perineum.

Case 6.—September 13th, 1850. Age, between twenty and thirty. A robust colored woman. First pregnancy, at term. Labor began with convulsions and coma, and lasted twelve hours; coma and convulsions for twenty-four hours. Mother recovered; child survived. Treatment, venesection, cathartics, anodynes. Mind wandering for several days.

Case 7.—Seen with Dr. Cady, and reported with his cases, No. 5.

Case 8.—Was seen in consultation; moribund.

Dr. Brewster laid little stress upon the theories of puerperal convulsions; the symptoms he had regarded as those of congestion of the central nervous system. He had reliance on venesection, and counteracting the exciting local cause; thought his experience militated against the theory of blood poisoning from defective respiration. The majority of his cases had been of robust, plethoric, hard-working, active females, and had occurred in the summer or autumn, under out-door exercise, pure air, and active respiration.

Dr. C. C. Holcomb reported the following cases:—

Case 1.—Season, spring. Age, between twenty and thirty; pale, lymphatic female; second pregnancy, at term. Result, death of mother and child. Treatment, venesection. Convulsions for five hours, and coma from the first hour to death.

Case 2.—Season, spring. Age, between twenty and thirty. Robust constitution. Second pregnancy, at term. Result, mother and child saved. Treatment, venesection, and anodynes. Coma for twelve hours after delivery.

Case 3.—Season, winter. Age, between twenty and thirty. Robust constitution. Second pregnancy, at term. Result, death of mother, child saved. Treatment, venesection. Patient became comatose immediately after delivery; lived five hours.

Case 4.—Season, spring. Age, between twenty and thirty. Pale, lymphatic female. First pregnancy, at term. Result, mother died, child saved. Convulsions and coma came on forty-eight hours after delivery; death in two and a half hours.

Dr. Holcomb stated that the majority of his cases were second labors; it should be taken into account that first labors were more numerous than successive ones. His cases had been marked by the premonitory symptom of sudden blindness, or a bright object seeming to move before the eyes.

Dr. H. H. Childs stated that there was no doubt that a great majority of the cases of puerperal convulsions were in first pregnancies.

Dr. Starkweather reported a case of convulsions in first pregnancy, resulting from a fall, in which he attempted to bleed, but the blood would not flow. He cupped the spine and back of the neck, and employed counter-irritation. Convulsions lasted eight hours. Death, in coma, an hour after delivery.

Dr. Jennings reported—

Case 1.—In December. Age, forty-one. Robust constitution. First pregnancy, at term. Result, recovery of mother, death of child. Treatment, copious bleeding four times. Perforated the head and delivered with forceps; enema, cathartic; pulse between 60 and 80. Patient well in two weeks.

Case 2.—In August. Age, twenty-eight. Nervous temperament. Second pregnancy, at sixth month. Result, death. Treatment, copious venesection. Convulsions for four hours; death an hour after delivery.

Case 3.—In March. Age, eighteen. Robust constitution; sanguine temperament. First pregnancy, about fifth month. Result, death. Treatment, fluid ext. of cannabis Indica. Sinapisms to spine. Convulsions of a tetanic character. No convulsions after delivery; death in four hours after.

Dr. Collins invited the Society to meet at his residence in Great Barrington, and dine with him, at its next meeting. The invitation was accepted, a vote of thanks was passed, and the Society adjourned.—*Boston Med. and Surg. Journal.*

EDITORIAL DEPARTMENT.

PERISCOPE.

Weekly Summary of American Medical Journalism.

By O. C. GIBBS, M.D.

PUERPERAL CONVULSIONS.

In the *Chicago Medical Examiner* for February, Professor N. S. Davis reports two cases of puerperal convulsions, in which blood-letting and chloroform were used. He makes the following remark, in regard to chloroform:—

"But in neither of the foregoing cases did the chloroform seem to produce any marked effect; and we doubt whether it is ever beneficial in that variety of puerperal convulsions accompanied by coma. There are cases met with, however, of a more hysterical character, in which there is little, or no lethargy or unconsciousness between the convulsive paroxysms; and in such I think the inhalation of chloroform may be of great service."

That there is some truth in the distinction here drawn, we have no doubt. Chloroform does not act so well where convulsions are followed by coma, as in cases of a more decided nervous or hysterical character.

We, however, regard it as appropriate in all cases—in the majority it acts like a charm, and, in such cases as it will not cure, it mitigates the severity; and we have yet to see the case in which it was productive of harm.

We have a case now under treatment that we consider worthy of mention in this connection. Day before yesterday (July 4th) we were called to see a lady, aged forty-five, and the mother of seven children. Insanity was hereditary in the family, and this patient we had frequently seen and from her physiognomy, singular ways, etc., had predicted that she would subsequently become insane.

On our arrival, we found the patient had had repeated convulsions, and was now comatose, or at least insensible to all surrounding persons and objects. She was pregnant, and it was supposed she had completed her time, and yet she was not in labor. Convulsions, of an epileptiform variety, recurred as often as once an hour. We gave chloroform at and during each paroxysm. The chloroform seemed to mitigate the severity of the convulsions, but did not prevent their return. At the third paroxysm, after our arrival, we bled the patient to the amount of sixteen ounces, with no apparent advantage. We first saw the patient at seven A.M., and bled at ten; at twelve we informed the friends that the only hope for the patient consisted in immediate delivery. Though five miles from our office, we went for necessary medicines and instruments. Returning at half-past one P.M., we found the patient as when we left; convulsions had continued to recur, and labor had not yet commenced. Because of the scarcity of chloroform at our command, we combined ether and chloroform in equal parts, and administered freely during each paroxysm, and in quantities sufficient to bring the system manifestly under its influence.

We now punctured the membranes, and let off an unusually large quantity of liquor amnii, dilated the os uteri with our finger to the utmost of our ability; the os yielded readily. We now made a strong decoction of ergot, opened the lips, and administered through an opening occasioned by absent teeth. Fortunately, what was thus administered was swallowed. Within half an hour, it was evident that labor-pains had commenced, and by three P.M. the labor was completed. During the hour she was in labor, she had three convulsions that were terribly severe. The lips became purple, and the pulse imperceptible. We should have observed above that the pupils of the eyes were contracted strongly. As soon as the labor was completed, the anæsthetic was discontinued. It was not long before convulsions again recurred, and the ether and chloroform were again resorted to during the paroxysms.

Urgent business calling us away, we left at five P.M., administering on leaving eight grains of calomel and one-fourth grain of morphine. The convulsions continued at intervals until three o'clock on the following morning.

July 5th.—We saw the patient at nine A.M. There was manifested no improvement, and we gave no encouragement. She was still entirely

unconscious, moaning at every breath, and constantly rolling the head from side to side. We applied a blister to back of neck, (three by five inches,) and ordered *iodide of potash in three-grain doses, to be repeated every hour.*

This morning (July 6th) we found the patient as yesterday, except there was no moaning or rolling of the head. She was still unconscious, and had remained so constantly since the first morning of attack. Urine had been voided freely, but involuntarily, as, we should have observed, it had been on the day previous. We now ordered a cathartic of castor oil—the iodide of potash to be continued in the same dose as yesterday, and repeated every *two* hours, instead of one—and two grains of quinine, and a drachm of spirits of nitre, to be given every two hours, at mid-intervals between the doses of the potash.

An unexpected delay in the completion of our *Summary*, enables us to complete this interesting case.

July 7th.—We found the patient conscious, but far from being rational. The bowels did not move until late in the day yesterday, when she became conscious of a desire for such movement. We neglected to observe that her child was born alive, and was doing well. The patient was now, for the first time, made aware that she had a son. It was brought and shown her. She declared it was not hers, and refused to touch or nurse it. Omitting the cathartic, the treatment of yesterday was ordered continued. Nourishment was ordered, and alcoholic stimulants in reasonable quantities, if they produced no flush of fever, no cerebral excitement, or tendency to a return of coma.

July 8th.—The patient was in every way apparently improved. She was much more rational, though exhibiting some eccentricities. Medicines, nourishment, and stimulants had all been well borne. The patient talked freely of her loss of three days, of her giving birth to a mature child while unconscious, of her impressions when shown the child, etc.

The treatment was continued, but the doses ordered repeated once in *four* hours each, instead of two, and discontinued from ten P.M. to six A.M.

From this date the convalescence was rapid, and we discontinued attendance on July 14th, just ten days after the labor. There was no secretion of milk, and a wet-nurse was employed.

We think the liberal use of iodide of potash

was productive of good in this case; and preceding it with a dose of calomel, which was allowed to remain forty-eight hours before working off, was far from being objectionable. Some might object to so early a resort to quinine, in the amount administered—twenty-four grains daily. For our own part, we never fear quinine when we see our indications clearly. With a moist skin and tongue, small and easily compressed pulse, the stage of disease would not induce us to delay resorting to quinine or stimulants, if we thought we saw impending death from exhaustion.

Our patient was of spare habit, feeble health, the skin pale, the countenance haggard, the symptoms discouraging, and, in our judgment, threatening immediate dissolution.

We think *belladonna* would have been a judicious addition to the iodide of potash during the first two or three days, and would have brought it to bear, had it been obtainable short of sending ten miles for it. The necessity for its use had passed, before we saw sufficient hope to induce us to send for it. In a similar case we should use it, perhaps mainly upon theoretical grounds. The unexpected success in the above case, however, should perhaps satisfy us with the means employed.

In the *Buffalo Med. and Surg. Journal* for February, Dr. Alfred Wharton, of St. Paul, Minnesota, reports a case of puerperal convulsions, in which the convulsions commenced anterior to any symptoms indicating the commencement of labor. Dr. Wharton resorted to chloroform, under which the convulsions were mitigated, and finally ceased. In the course of "a few hours," the os being dilated, the membranes were ruptured, and, in a short time, a dead fœtus was expelled. The patient made a rapid recovery.

The doctor thinks the chloroform had a better effect in this case than blood-letting, blistering, and calomel would have done.

A NEW HÆMOSTATIC.

Dr. W. N. Coté, the Paris correspondent of the *British-American Journal*, says that "latterly a plant called *Bengarvar Gamba* (*Pilea Tibotis*) has been brought over from Java, which possesses extraordinary hæmostatic qualities. It is a kind of fern, yielding a mass of delicate filaments, so light and flexible as to float a long time in the air. The color varies according to their thicknesses, from a brownish-gold hue to a greenish black. Six grains of these filaments form a sufficient quantity to stop the bleeding of an artery

a twelfth of an inch in diameter. This substance displays such avidity for water, that it becomes soaked through and sinks to the bottom of the vessel containing it in less than half a minute. If exposed to heat, it exhales an empyreumatic odor, and if it be burnt it explodes. Its styptic properties are naturally attributable to the rapidity with which its filament, acting by capillary attraction, absorb the aqueous parts of the blood, and thus causes its immediate coagulation. Moreover, the elasticity of these filaments, swollen by the absorption of the liquid, causes them to form a kind of impenetrable plug, which, adhering to the wound, keeps it well closed. The advantages of this styptic over those already known are the promptness of the effect and the possibility of forming the coagulum where other agents fail, as for instance, in carcinomatous and scorbutic ulcers. Before using it, it must be triturated; a certain quantity is then applied to the wound, and a compress adapted over it. The styptic thus penetrates into the narrowest fissures, and instantly produces the desired effect."

CARBONIC ACID AS A HEALING AGENT.

Writing from Paris to the *British-American Journal*, Dr. W. N. Coté says: "An interesting communication on the healing qualities of carbonic acid has been received by the *Académie des Sciences* from Drs. Demarquay and Leconte. These gentlemen had sent up a paper about two years ago on the modifications which atmospheric air, oxygen, nitrogen, hydrogen, and carbonic acid were calculated to produce on subcutaneous sores, and had also given a description of the healing process. In their present paper, they more especially mention the healing power of carbonic acid in the case of tendons of recent formation, whence they have been led to try it for obstinate sores. For this purpose, the diseased limb is placed in an apparatus of their invention, made of India-rubber, and communicating with a vessel in which carbonic acid is evolved. Sometimes the application is made only once in twenty-four hours, at others the gas is evolved every six or eight hours. As the pressure exercised by the India-rubber on the limb must not be so strong as to impede the circulation, the borders of the apparatus are secured by strips of diachylon plaster, to prevent the escape of the gas. The physiological phenomena produced by the carbonic acid are as follows: 1. The patient announces a sensation of heat and pricking all over the part subjected to the action of the gas, and especially on the sore; moreover, the skin is slightly injected. 2. After the apparatus has been on some time, it is found to contain a certain quantity of liquid, produced by the exhalation from the sore, and the perspiration of the member. The apparatus must, therefore, be washed with a small sponge once or twice a day, if the application is to be continuous. The exciting effects produced by the carbonic acid shows that this agent must not be employed on recent sores; but only on those which have

obstinately resisted all other treatment. Still the excitement produced by carbonic acid is much inferior to that produced by oxygen, the application of which should, in certain cases, precede the former. Under the influence of carbonic acid, the detersion of the sore is affected; it assumes a rose-colored tint, its edges sink down, and in a very short time a pellicle is formed around, while points of cicatrization are remarked near the centre, which soon spread and join the border. Carbonic acid is therefore a most powerful healing agent in the cases above alluded to."

REVIEWS AND BOOK NOTICES.

Amputation of the Cervix Uteri.—A paper read before the New York Academy of Medicine, April 16, 1862. By A. K. GARDNER, M.D.

There seems to be an increasing sentiment in favor of heroic operations upon the uterus. The unprecedented success of Dr. Sims in that direction, has stimulated others not only to investigation, but to perform operations, which, to say the least, are hazardous. A few years since, any surgical operation upon this important organ of the body, would have been considered not only hazardous, but the simple suggestion would have been treated as a reckless waste of human life. Now the cervix uteri may be amputated with almost the same impunity with any other portion of the body. There are some dangers attending it, it is true. Hemorrhage may occur in considerable quantity from the incisions of the bistoury; an opening may be made into the abdominal cavity, or into the prolapsed bladder and rectum; violent inflammation may supervene, but any or all these are considered no serious bar to the operation, either by the surgeon or the patient, and he sits down to an operation upon the uterus with as much confidence of success and fearlessness of ill consequences, as he would to excise a tonsil, amputate a finger, or open a superficial abscess. The hemorrhage is easily restrained by ligatures, styptics, or the tampon. The opening into the abdominal cavity, or bladder, or rectum, is mended by sutures, as neatly as a rent in a garment is by the needle, and the inflammation is exorcised "with the ordinary armentaria." Such is the triumph of modern surgery. No instance is yet recorded "where pregnancy has occurred after the complete amputation of the cervix." But "we know of no reason why it should not take place in a uterus otherwise healthy, even without its normal cervix." The tendency of the operation is to produce closure of the canal, but this may be remedied by careful attention, so that sterility may not result from this cause. And then, again, on the other hand, we are told that the sterile sometimes become fruitful after a successful operation of this nature.

The monograph before us will increase the rage for surgical operations in the diseases of

women. The severe although successful case which it narrates, and upon which the author comments with much enthusiasm, forms a strong argument in favor of surgical interference in many cases which have hitherto been considered hopeless. And the low rate of mortality which has followed in the comparatively small number of these operations, shows that "there is not in reality the danger to life which is generally supposed to exist."

THE MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SATURDAY, JULY 19, 1862.

SICKNESS IN THE ARMY—MILITARY HOSPITALS.

THE grand armies of the Union are terribly depleted by sickness. The rolls of the regimental quartermasters are sadly at fault as respects efficient fighting men. A fearfully large proportion are on the sick list, many of them permanently disabled.

Any army at this season of the year would have its numbers reduced by sickness, especially when carrying on its operations in a climate to which it is not inured. The enervating effects of a warm climate on the constitutions of men from lower latitudes are well known. The armies of France in Egypt, and of Britain in India, have suffered, and still suffer terribly from this cause, even though composed of veteran troops who have long been inured to the hardships and toils of a soldier's life.

The armies of the Union, it is true, labor under the disadvantage of not being seasoned to the exposures of camp life, the fatigues of long marches and labors on entrenchments, and on irregular and often insufficient diet. Our army was formed in a very few months, from such material as offered itself, and was at once placed in the field and exposed to the toils and hardships of an active fall and winter campaign. But a visitor to any of our military hospitals, will find that a large proportion of the patients have been unable to do duty almost ever since they enlisted. The fact is, they entered the army with broken-down constitutions, and a proper medical inspection when they first offered themselves would have rejected them, and thus saved to the government an immense outlay in paying the wages of whole brigades of invalid soldiers, feeding them and providing accommodations and medical attendance for them. The anxiety of ambitious men

to raise squads, companies, and regiments, in order to secure commissions in them, and the carelessness and ignorance of medical men in not making proper inspections, caused the acceptance of thousands of volunteers who have proved but a burden to the government, and, in a measure paralyzed its efforts to restore order and peace to our now torn and distracted land.

What are ordinarily termed the "casualties of war," viz., the loss of life, the permanently and temporarily disabled in battle, and the sickness to which any sound able-bodied man who leads the life of a soldier is liable, would scarcely have affected the efficiency of our armies in any perceptible degree. As it is, however, the costly blunders referred to above, and for which, we are sorry to say, the medical profession is principally responsible, have disbanded some maximum regiments, and reduced many others to skeletons. We see it stated that the army of the Potomac alone has been reduced by 30,000, in consequence, in great part, of sickness. This, if true, will show what an expense defective medical inspections have been to the country. We trust that the evil will be at once corrected, and that no more volunteers will be accepted who are not "able-bodied."

Government has made liberal provision for these disabled soldiers, not only in the regimental and field hospitals, but by providing extensive hospitals for them in various localities, as at Fortress Monroe, in Washington and vicinity, Annapolis, Baltimore, and other large cities, where everything is done that can be to make them comfortable and to restore them to health. We have no means of estimating the number of the sick in the government hospitals throughout the country, but it must be very great, as, at this time there can scarcely be less than 6000 in the hospitals in this city alone. The aggregate numbers of the sick will increase, probably, for some weeks to come, or, until the invigorating air of autumn, with its cool days and frosty nights, succeeds the enervating influence of the sultry air of these hot summer months.

New Method of obtaining Iodine.—Mr. McArdle, an Irish chemist, has discovered a new method of preparing iodine from the seaweed or kelp. Instead of the process of burning, by which a large proportion of the iodine is lost, the plant is fermented in tanks, by which means the organic portion is destroyed, and the whole of the iodine remains in the solution.

EDITORIAL NOTES AND COMMENTS.

The Indian Remedy for Variola.—Some time since we noticed the new remedy for variola in use among the Indians of Nova Scotia. We derived our information of its virtues from a notice of it in one of our foreign exchanges. In England it had attracted so much notice as that its virtues were to be thoroughly tested. At a recent meeting of the Medical Society of Nova Scotia, held at Halifax, the subject was discussed, and a resolution passed to the effect that there was not "any reliable data upon which to ground any opinion in favor of its value as a remedial agent."

Expulsion of a Mole.—Dr. Seip, of Tannersville, Pennsylvania, sends us the notes of the following case. He says:—

"May 26th. Was called to see Mrs. P., aged thirty-five; found her suffering with severe pains, like those of real labor, and with uterine hemorrhage.

"I ascertained the history of her case to be as follows: She had suppression of menses in the month of May, 1861, which was succeeded by swelling of the mamme, tumefaction of the abdomen, disgusts, nausea, and disorder of most of the functions. Still later she suffered from pain in the loins, from dysuria, and felt something like a ball rolling about within her as she changed her position; and, finally, had frequent and irregular attacks of uterine hemorrhage.

"The signs of true pregnancy not being present, I suspected the existence of a foreign body within the uterus. Not, however, being positive in my diagnosis, I deemed it prudent to arrest the hemorrhage, which I succeeded in doing by the appropriate remedies, and allow nature, in due course of time, to expel the substance, whatever it might be. I left her in the evening without pain and no hemorrhage.

"The next day I found her with slight pain in the loins, but with no hemorrhage, otherwise feeling tolerably comfortable.

"May 28th. I called to see the patient, and was presented with an irregular fleshy mass, as large as a foetal head, a fleshy mole, which nature, our most potent agent, expelled for her during my absence in the morning.

"The patient is now comfortable under the treatment usually employed in an ordinary accouchment."

Quinia and Zinc in Ague.—Dr. William G. Kidd, of Princeton, Indiana, says:—

"I have, for the last seven years, been using the following pill in my practice, that seldom

fails of producing a cure in intermittent fever, for the season:—

R.—Quin. sulph. 3ij;
Zinc sulph. 3j;
Ol. pip. nig. 3ss;
Acid. sulph. dil. f3ss;
Syrup. empyreum. q. s.
M. ft. pil. 120.

"The pills are prepared by powdering and mixing the quinine and zinc, adding the ol. pip. nig. and syrup molasses, q. s., to make the whole mixture a proper consistence for pills; then add the acid. mix thoroughly; when it becomes quite thin, let it stand until it hardens, and make the pills. If too hard or brittle, by working with the spatula it will soon come to a proper consistence.

"In treating ague, I usually commence with an alternative, and give the pills, one every hour, until twelve are taken during the interval of the paroxysm. When the paroxysm comes on every other day, I give the pills during the intervening day.

"The above is as near a specific for ague as I have ever met with."

Noble's Tonic Elixir.—The following is said to be the recipe for a tonic elixir formerly much used by Dr. Noble, of this city, in his practice. Some quack has appropriated it to his special benefit, and doubtless has made money from it:—

R.—Rad. rhei;
Cort. aurantii;
Sem. carui (vel fœniculi), aa. 3j;
Spir. vini gall. Oj.

Displace.

Dose—A teaspoonful three times a day, after each meal.

The original recipe is now in the hands of a wholesale druggist of this city. It was used with the greatest success by Dr. Noble in the treatment of obstinate constipative flatulence, colic, etc.

Dr. F. H. Hamilton.—We have been officially informed that the report generally published that this eminent surgeon had been "relieved" as Medical Director of the Fourth Corps, Gen. Keyes, is incorrect. The recent changes among the medical directors have been the relief of Dr. Brown, of the Sixth Corps, Gen. Franklin, by Dr. White; and Dr. Hammond of the Second Corps, Gen. Sumner, by Dr. Smith.

Green without Poison.—The use of arsenical preparations for producing a bright green in ornamental confectionery has often produced dangerous symptoms. It has been recently noticed that a bright green may be prepared by indigo and saffron, which, in the small quantities required, may be considered innocuous.

CORRESPONDENCE.

Domestic Correspondence.

A New Surgical Operation Proposed.

JERSEYVILLE, ILL., July 10, 1862.

EDITORS OF THE MEDICAL AND SURGICAL REPORTER: GENTLEMEN:—Mr. P., of an adjoining county, aged twenty-three years, a well-formed, robust man, a little over the medium size, this day presented himself for my advice, and gave the following account of himself:—

"That when a soldier in an Illinois regiment of volunteers at Pittsburg Landing, he was wounded by a musket ball passing through his right shoulder; he fell prostrated; bled much; was placed on his left side, close between two dead men, to support him in that position, when the bleeding ceased. He was then told that his wound was mortal, and was left to his fate. In this position he lay in the mud two days, until the fighting ended, when he was taken to the hospital, kept there a few days, and then sent to St. Louis, Mo., and finally got to his home."

I found the wounds at the ingress and egress completely cicatrized. The former was situated about one and a half inches below the middle of the clavicle. The latter was situated about midway of, and two inches from, the posterior edge of the scapula. The arm appeared healthy, but has lost all sensation and all power of motion.

Such in short is the case; and in it we see, while battling for his country, a stout, healthy, young man deprived of the use of his right upper extremity, by the loss of nerve connection.

Now, with me the question is, can this loss of nerve connection be restored?

In answer, I would say *I think* it can, by exposing the nerve, making new surfaces by cutting off the superior and the inferior ends, and adjusting between them a similar piece of nerve, taken from a suitable animal, closing up the wound, and trusting to Providence and nature as to the result. And why should it not grow, and become organized as well as the cornea of a pig on the eye of a man?

The case to me is a new one. But had I the vision and energy that I possessed forty odd years ago, I would do my best to accomplish this surgical feat for the benefit of so worthy a young man.

With all due deference, I submit this case to the consideration of my surgical brethren.

Yours, E. A. D'Arcy, M.D.

NEWS AND MISCELLANY.

Commencement of the Long Island College Hospital, New York.—The commencement of the Long Island Hospital was held in the lecture-room of the college building, on the evening of the 14th of July. Notwithstanding the extreme heat of the weather, the room was crowded to its utmost capacity, many being compelled to sit in the adjoining room. The audience was composed of some of the fairest representatives of the gentler sex.

Charles Christmas, Vice-President of the Board of Regents, presided.

The exercises were opened with prayer, by Rev. Dr. Spear. Dr. Dudley, Registrar of the college, presented the following gentlemen as candidates for the degree of Doctor of Medicine:—

William A. Webster, of New Hampshire; J. C. Morton, of New York; Henry H. Heilner, of Pennsylvania; Joseph McMonagal, of New Brunswick, B.N.A.; O. B. Wilcox, of Albany; Otis M. Humphrey, of Massachusetts; William Richards, of Cuba; Abram H. Hunt, of Ohio; Louis V. Estelle, of France; Asher A. Shiverick, of Massachusetts; William W. Lamb, of Pennsylvania.

Dr. Henry, acting as Secretary, administered the Hippocratic obligation.

The degree of Doctor of Medicine was conferred, and the candidates addressed by Dr. Mason, President of the Collegiate Department. Dr. Mason, after speaking of the advantage which clinical teaching gives when united to didactic lectures, which this college was the first to inaugurate in this country, and of the call that our present condition as a nation had upon the patriotism and self-denial of her citizens, said the class of 1860 and '61, when there was much less need, contributed largely to this great cause. Prentiss and Brown Demainville and Pearce Lynch, and O'Leary, E. O. Brown, Deering, and others, whose names I cannot recall, with Webster and Heilner, of our present class, with Dalton and Hamilton, two of our most highly esteemed and accomplished professors, have dedicated themselves to the high and holy work. I trust the class of '62 will not be behind them. I understand that many of your number are ready to go to the field as soon as you have received the honors of this institution. Go swell the numbers of your brethren, the children of your *alma mater*, who are already engaged in the service of our country. Go where honor and duty call you, and may the God of battles bless you and your compatriots in arms, shield you and them in the hour of danger, and crown your conflicts with victory; and when each revolted State shall have returned to its allegiance, and peace shall be restored to our afflicted land, and you shall return to the ordinary pursuits of civil and professional life, may you have the gratification to feel that you have well performed your parts.

Prof. Hutchison followed with an address upon

the "Life and Character of Charles E. Isaacs, M.D." He spoke of the high moral character and great labors of the demonstrator, physiologist, and physician. He was the first one to demonstrate the fact that the pleura ascended one inch higher above the clavicle than had been supposed, and that the peritoneum descended lower in the negro than in the white man, the knowledge of which is of great importance in performing operations in those parts.

The President read a letter from the valedictorian, William Webster, now surgeon of the Seventh New Hampshire Regiment, stating that his regiment was filling up rapidly; that his duties were so great that he was unable to obtain a furlough of sufficient length to enable him to perform the duties to which he had been chosen by his fellow-classmates. The valedictory was therefore dispensed with, and the exercises closed with the benediction, by Rev. Dr. Farley.

The Comparative Number of Sick in an Army.—The Sanitary Commission says that an army of 500,000 men in the field, must have over 58,000 in hospital.

The Ratio of Births in War.—It has often been asserted that the proportion of males to females born in time of war is greater than during "the piping times of peace." This appears to be confirmed by the statistics of Providence, Rhode Island; in 1861, the number of masculines born having been 936, against 780 females—a difference of fully eighteen per cent.

Fiske Fund Prize Essays.—The Trustees of the Fiske Fund, at the annual meeting of the Rhode Island Medical Society, held in Providence, June 4th, 1862, announced that they had made no award of the premiums offered by them last year. They propose the following subjects for 1863: 1st. What evidence is there that inflammatory and febrile diseases have undergone any general change of type? 2d. Gunshot wounds, particularly those caused by newly-invented missiles. For the best dissertation on each of these subjects, the trustees will pay one hundred dollars. Dissertations should be sent, free of expense, to Dr. S. Augustus Arnold, Secretary of the Fiske Fund Trustees, Providence, R. I., on or before May 1st, 1863. Each dissertation should be marked by some motto, and accompanied by a sealed packet, bearing the same motto on its outside, and the author's name and residence within. Packets accompanying unsuccessful dissertations will be destroyed unopened.

Mortality of Foundlings.—At a late sitting of the Academie des Sciences, we learn, by a letter written from Paris, and published in the *British-American Journal*, that "M. Velpeau presented, in the name of the author, Dr. Lebarillier, a paper on the mortality of foundlings at Bordeaux, within the age of a twelvemonth. In the course of twelve years—that is, from the 1st of January, 1850, to the 31st of December, 1861—the number of infants within that age admitted at the hospital was 6178, viz., 3073 boys, and 3105 girls. Of this

number, 977, viz., 510 boys, and 467 girls died in the course of the first month; those that died at the hospital numbered 785, comprising 410 boys, and 375 girls; the remaining 202, or 110 boys, and 92 girls, died in the country. This excess of mortality at the hospital, compared to that in the country is explained by the fact that the healthy subjects are sent into the country ten days at the latest after their arrival, while the sickly ones are kept there until they have recovered. Out of the 6178 children admitted, 2131 died before the end of the year, viz., 1114 boys, and 1017 girls; 1083 having died at the hospital, and 1048 in the country. Thus, the mortality at the Hospital of Bordeaux is not more than 33 per cent. in the first year of infancy, while it amounts to 55 per cent. in Paris and the department of the Seine, according to Dr. Bouchut's calculations.

Bread for the Army.—A bakery at Fortress Monroe is, it is said, capable of baking 80,000 loaves daily.

A German traveler, Dr. Scherzer, gives an interesting account of the voyage of the Austrian frigate Novara among the islands of the Pacific. In one of the Caroline groups, Dr. Scherzer found a Scotch physician, "Dr. Cook," established, and in good practice; he had been in this coral island for a quarter of a century, and had his hut divided into three apartments. The outer room was his surgery, containing the usual glass bottles, etc., of his profession, and everything was neat and orderly. Cook was quite a philosopher. "Nothing," his German brother complains, "surprised him—nothing roused him." There he lived, his face pale, faded, expressionless, with a long silver-gray beard, clothed in a coarse woollen jacket, with a huge broad-brimmed, worn-out straw hat pulled low over his forehead, quite regardless of the great outer world and its concerns.

Physical Training in Schools.—A resolution has been introduced before the British Parliament proposing physical training as a part of the regular system of education in schools.

A New Projectile.—At the battle of Malvern Hill, on the James River, Virginia, the rebel Gen. Huger was shelled out of his camp by the Federal gunboats, which his soldiers stated threw *Pennsylvania Dutch ovens!*

Recent Publications.

American.—Contributions to the Natural History of the United States of America, by Louis Agassiz. Health: its Friends and its Foes, by the venerable R. D. Mussey, M.D.

English.—Prolapsus, Fistula in Ano, and Hemorrhoidal Affections; their Pathology and Treatment, by T. J. Ashton. A Commentary on Midwifery, and the Diseases of Woman and Children for the last Half Year. Reprinted from Braithwaite's Retrospect. On Ovarian Dropsy; its Nature, Diagnosis, and Treatment, by J. Baker Brown. On the Use of Perchloride of Iron and other Chalybeate Salts in the Treatment of Consumption, by James Jones. On the Treatment of Gonorrhoea without Specifics, by J. L. Milton. Infanticide; its Law, Prevalence, Prevention, and History, by Wm. Burke Ryan. Parturition without Pain, by James Townley.

MARRIED.

DAVIS—HAIGHT.—At Newcastle, on Wednesday, June 18th, by Friends' ceremony, Robert T. Davis, M.D., of Fall River, Mass., to Susan Ann, daughter of the late Moses Haight, of the former place.

GRAFTON—BOMBAUGH.—On Tuesday evening, July 1st, by the Rev. Charles J. Bower, William H. Grafton, M.D., of Nevada City, Colorado Territory, to Julia, youngest daughter of Aaron Bombaugh, of Harrisburg, Pa.

DIED.

KNAPP.—At Jerseyville, Ill., July 12th, A. R. Knapp, M.D. aged sixty-one. A respectable practitioner of medicine at that place for twenty years.

BAILEY.—At Bellows Falls, Vt., June 23d, of disease of the heart, E. Louise, wife of Dr. M. Bailey, aged twenty-six years.

SIMPSON.—In the City of Baltimore, on Friday, June 27th, Harriet St. John Simpson, wife of Surgeon Josiah Simpson, U. S. A. Medical Director of the Middle Department.

SEAMAN.—At Flushing, L. I., on Saturday, July 6th, Amelia S., widow of the late Dr. Z. W. Seaman, in the seventieth year of her age.

FLOYD.—At her residence, No. 124 West Twelfth Street, New York City, Augusta T. A. Van Horne, relict of the late Samuel Floyd, M.D.

Vital Statistics.

OF PHILADELPHIA, for the week ending July 12, 1862.

Deaths—Males, 106; females, 166; boys, 123; girls, 99. Total, 395. Adults, 143; children, 252. Under two years of age, 165. Natives, 277; Foreign, 57. People of color, 20.

Among the causes of death, we notice—Apoplexy, 8; convulsions, 18; croup, 1; cholera infantum, 54; cholera morbus, 2; consumption, 32; diphtheria, 6; diarrhoea and dysentery, 14; dropsy of head, 2; debility, 28; scarlet fever, 10; typhus and typhoid fever, 13; inflammation of brain, 14; of bowels, 4; of lungs, 13; bronchitis, 0; congestion of brain, 6; of lungs, 2; erysipelas, 1; hooping-cough, 0; marasmus, 17; small-pox, 2.

For week ending July 13, 1861.....398

" " July 12, 1862.....355

Population of Philadelphia, by the census of 1860, 568,034. Mortality, 1 in 1557.

OF NEW YORK, for the week ending July 7, 1862.

Deaths—Males, 188; females, 151; boys, 98; girls, 100. Total, 339. Adults, 141; children, 198. Under two years of age, 135. Natives, 247; Foreign, 92; Colored, 8.

Among the causes of death, we notice—Apoplexy, 2; infantile convulsions, 18; croup, 8; diphtheria, 12; scarlet fever, 9; typhus and typhoid fevers, 18; cholera infantum, 28; cholera morbus, 0; consumption, 50; small-pox, 8; dropsy of head, 14; infantile marasmus, 15; diarrhoea and dysentery, 16; inflammation of brain, 0; of bowels, 10; of lungs, 18; bronchitis, 0; congestion of brain, 6; of lungs, 6; erysipelas, 0; hooping-cough, 0; measles, 0; 178 deaths occurred from acute disease, and 37 from violent causes.

For week ending July 8, 1861.....000

" " July 7, 1862.....000

Population of New York, by the census of 1860, 814,277. Mortality, 1 in 2412.

OF BOSTON, for the week ending July 5, 1862.

Deaths—Males, 26; females, 33. Total, 59. Natives, 41; Foreign, 15.

Among the causes of death, we notice—Phthisis, 10; cholera infantum, 1; croup, 1; scarlet fever, 6; pneumonia, 4; variola, 1; dysentery, 0; typhus fever, 0; diphtheria, 0; hooping-cough, 0; convulsions, 2.

Population of Boston in 1860, 177,902. Average corrected to increased population, 71-67.